



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/456,665      | 12/09/1999  | TADAO KIKUMOTO       | 230980.0213         | 6748             |

7590 04/20/2005  
TED R RITTMASER  
FOLEY & LARDNER  
2029 CENTURY PARK EAST  
SUITE 3500  
LOS ANGELES, CA 900673021

|          |
|----------|
| EXAMINER |
|----------|

CHAWAN, VIJAY B

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2654

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/456,665             | KIKUMOTO, TADAO     |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Vijay B. Chawan        | 2654                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/26/04 & 6/25/04.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-10,12-15,17-20 and 23-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-10,12-15,17,26,27,32 and 33 is/are allowed.
- 6) ☒ Claim(s) 23-25, 28-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/15/02</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claims 2-10, 12-15, 17-20, 26, 27, 32 and 33 are allowed.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 28-31 recites the limitation "delimiting location" in line 1. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claim 25 is rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki (6,169,240).

As per claim 25, Suzuki teaches a waveform compression and expansion apparatus for compressing or expanding a plurality of temporally divided waveforms, comprising:

a processing format specification means in which a plurality of processing formats is specified for each of the plurality of temporally divided waveforms during compression and a plurality of processing formats is specified for each of the plurality of temporally divided waveforms during expansion and,

a compression and expansion means in which compression and expansion processing is performed on each temporally divided waveform to compress or expand the temporally divided waveform in a direction of a temporal axis according

Art Unit: 2654

to the specified compression and expansion format (Col.68, lines 1-16, Col.52, lines 5-10, 26-44, and 50-65, Col.67, lines 12-17).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 23, 24, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (6,169,240) in view of Kageyama et al., (5,412,152).

As per claim 23, Suzuki teaches a waveform compression and expansion apparatus for compressing or expanding a plurality of frequency band-divided waveforms generated from an original waveform, the plurality of frequency band-divided waveforms comprising waveform components of a plurality of frequency bands, the apparatus comprising:

compression and expansion means with which the plurality of frequency band-divided waveforms are apportioned to at least two kinds of formats during compression and at least two kinds of formats during expansion and each of the plurality of frequency band-divided waveforms are compressed or expanded in a

Art Unit: 2654

direction of a temporal axis by an identical amount (Col.68, lines 1-16, Col.52, lines 5-10, 26-44, and 50-65, Col.67, lines 12-17).

Suzuki, however, while teaching the compression and expansion means, does not specifically teach, a superimposing means in which, by superimposing the plurality of compressed or expanded frequency band-divided waveforms, an original waveform that has been compressed or expanded in the direction of the temporal axis is formed. Kageyama et al., do teach a superimposing means in which, by superimposing the plurality of compressed or expanded frequency band-divided waveforms, an original waveform that has been compressed or expanded in the direction of the temporal axis is formed (Col.7, lines 8-47). Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to incorporate the creating a combination waveform as taught by Kageyama et al., in the apparatus of Suzuki, because, this would be advantageous in terms of waveform controllability

As per claim 24, Suzuki teaches an apparatus as recited in claim 23, wherein the compression and expansion means executes compression and expansion processing with a processing period that is as long as the frequency band-divided waveform which possesses the waveform component of a frequency band in the plurality of frequency band-divided waveforms, and forms compressed or expanded waveforms that correspond to the frequency band-divided waveforms (Col.68, lines 1-16).

***Response to Arguments***

8. Applicant's arguments with respect to claims 23-25, and 28-31 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vijay B. Chawan whose telephone number is (571) 272-7601. The examiner can normally be reached on Monday Through Thursday 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2654

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Vijay B. Chawan  
Primary Examiner  
Art Unit 2654

vbc  
4/17/05

VIJAY CHAWAN  
PRIMARY EXAMINER